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India

Sugar Annual

2017

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Report Highlights:

India's centrifugal sugar production in marketing year (MY) 2017/18 (Oct-Sept) is expected to increase by 18 percent to 25.8 million metric tons (MMT). Uttar Pradesh will be the largest producer of sugar in India, followed by Maharashtra. Current year sugar production is revised lower to 21.9 MMT, reflecting current trade estimates. Sugarcane planting and production in MY 2017/18 (out-year) will recover to 4.7 million hectares (MH) and 330 MMT. While sugar consumption is expected to recover marginally to 26 MMT, India may import an estimated 0.5 MMT of (mostly raw) sugar to augment local supplies.

Note: All sugar data in the report are raw value basis unless otherwise mentioned.

Commodities:

Sugar Cane for Centrifugal Sugar, Centrifugal

Production:

Centrifugal Sugar Production will Rise 18-Percent to 25.8 MMT

India's centrifugal sugar (henceforth sugar) production during the out-year is expected to increase by 18 percent to 25.8 MMT. The out-year sugar production estimate includes 540,000 metric tons (MT) of *khandsari*, a local type of low-recovery sugar prepared by open-pan evaporation. The forecast of a relatively larger sugarcane (cane) crop, improved sugar recovery rate (11 to 11.3 percent), and general expectations that sugar prices will remain strong should encourage higher sugar production. The preceding statement assumes normal weather and market conditions.

Uttar Pradesh (UP) will once again be the largest producer of sugar in India, followed by Maharashtra. Both states now contribute upwards of 73 percent of India's total sugar production, a notable uptick from their earlier cumulative average of 60 percent. Production gains in both states will compensate for combined losses in Karnataka, Tamil Nadu, Andhra Pradesh, and Telangana. These states received low levels of precipitation last year and were declared as drought-hit. Combined production from these states will be 3 MMT less than normal. Cane supplies to *gur* (jaggery or crude, non-centrifugal lump sugar) manufacturing units will return to more normal levels, with out-year *gur* production reaching upwards of 6 MMT.

Per the latest production data, MY 2016/17 sugar production is estimated at 21.9 MMT, down by 8.4 percent from the previous estimate and almost 20 percent below last year's production. As a result, total sugar supplies are limited to 32.6 MMT, which is just enough to meet the out-year consumption and stock requirements. For the third time in recent years, Indian sugar production dropped below consumption (25.6 MMT). Maharashtra and UP will contribute 22 percent and 43 percent respectively, of total production (crystal weight basis).

Sugarcane Planting and Production Will recover to 4.7 MH and 330 MMT

Assuming a normal 2017 southwest monsoon and favorable planting conditions, out-year cane planting is expected to rise to 4.7 MH compared to 4.5 MH planted last year. Higher and more timely cane payments made during MY 2016/17 reduced the debt mills owed to farmers, which in turn reduced farmers' debt (particularly in UP). Sufficient water levels in major reservoirs in Maharashtra should also support higher cane planting in that state. The national cane yield average will reach 70 MT per hectare, compared to 64 MT per hectare last year. An increase in early-maturing and high-yielding varieties of cane in UP and the partial recovery in the area planted lost to drought in Maharashtra will buoy the national average. As a result, total sugarcane production is expected to rise by 15 percent to 330 MMT.

Farmers in UP and Maharashtra are expected to bring additional area under cane cultivation due to better returns as compared to competing crops. Normal monsoon rains in 2016 helped water levels recover in major reservoirs in Maharashtra. Farmers who shifted away from cane planting due to drought in past have returned to cane for harvest in MY 2017/18, as they feel cane is a more sturdy and reliable crop.

The <u>second advance estimates</u> from the Indian Ministry the Agriculture (MinAg) calculates sugarcane production in MY 2016/17 at 309.98 MMT from 4.5 MH. However, Post estimates current year cane production at 288 MMT, reflecting the most recent data from the industry. Similarly, the 'final' cane production estimates for MY 2015/16 is 348.48 MMT from 4.96 MH.

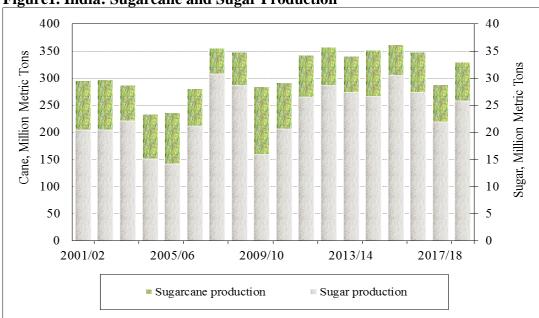


Figure 1. India: Sugarcane and Sugar Production

Source: Industry and trade sources

Consumption:

Out-year sugar consumption is forecast to recover to 26 MMT, a marginal increase from the 25.6 MMT estimated for current year. Bulk consumers account for two-thirds of total sugar consumption in India. Over the last six months, moderate sugar demand from soft drink manufacturers, bakeries, hotels, restaurants, and other bulk and individual users led to a decrease in aggregate demand, matched by relatively lower sales reported by sugar mills. The disruption in the flow of currency following India's demonetization in November 2016 is the likely explanation for this dip.

Most *khandsari* sugar is consumed by local sweet shops and *gur* is mostly consumed in rural households and for feed use. India's stable economy, rising incomes, growing young population, and changing consumption patterns are key drivers for food consumption.

Market Prices

Sugar prices have rallied by more than 58 percent since July 2015 and should remain stable, given tight supplies in the current year and the possibility of even tighter beginning stocks in October 2017, which marks the beginning of the Indian festive season. Regional disparities in supply also underpin domestic prices. *Gur* prices have been relatively stable following a correction in *gur* prices after October 2016 (Figure 2). Demand for *gur* has been rather tepid particularly in last six months due to the demonetization cash crunch. However, *gur* prices are likely to firm up through September. Currently, Indian wholesale sugar price is trading at \$600 per MT, while *gur* is selling at a discount of \$115 per MT to sugar.

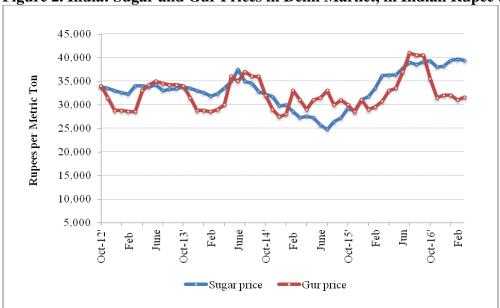


Figure 2. India: Sugar and Gur Prices in Delhi Market, in Indian Rupee (INR) Per MT

Source: Industry and trade sources

Trade:

Assuming normal market conditions, India may import an estimated 0.5 MMT of sugar (mostly raw) in MY 2017/18. A 20-percent drop in total supplies over the last three years will encourage imports only to augment local supplies while consumption will recover marginally to 26 MMT. The preceding statement assumes duty-free imports for commercial viability while export in forecast year is estimated to be negligible except for some sugar re-exported under the under the Advance License Scheme (ALS). Under the ALS, local sugar millers are allowed to import raw sugar duty-free against a future export commitment. Note: If sugar production is higher than anticipated, the Government of India (GOI) will likely intervene with market controls and regulate levels of imports.

International sugar prices have been lower than domestic Indian prices since October 2016. Prevailing domestic sugar prices should encourage mills to sell locally, keeping Indian sugar exports less competitive. Although India mostly imports sugar from Brazil, in recent years small volumes of New Zealand and British sugar were also imported (500,000-800,000 MT), along with even smaller volumes were from Germany, the United States, Italy, the UAE and Australia.

Current year sugar exports are nil except for an estimated 1.2 MMT as refined sugar re-exported under the ALS. Commercial imports are now estimated at 500,000 MT (mostly raw).

Trade Policy

Per the April 5, 2017, notification (No. 01/2015-2020) from the Ministry of Commerce and Industry's Director General of Foreign Trade will allow 500,000 MT of raw sugar imports (subject to the tariff rate quota) to be imported through June 12, 2017. The decision was taken to address regional production gaps and control sugar prices.

After June 12, 2017, import duties levied against imported sugar will be 40 percent, unless otherwise notified. Sugar can be exported under the open general license, but sugar exports remain subject to the 20-percent export duty per the June, 16 2016, Customs Notification No. 37/2016. However, refined sugar derived from raw sugar imported under the ALS shall be exempted from the 20-precent export duty, as clarified by the July 6, 2016 Customs Notification No. 41/2016.

Stocks:

Ending stocks for the out-year are forecast at 6.4 MMT and will be just sufficient to meet India's three-month consumption requirement. Stocks for the current sugar season remain unchanged at 6.1 MMT, the lowest in five years.

Policy:

Sugarcane Production and Pricing Policy

The GOI supports research, development, training of farmers, transfer of new varieties, and improved production technologies (seed, implements, pest management) to sugarcane growers as to raise yields and recovery rates. The Indian Council of Agricultural Research conducts sugarcane research and development at the national level. State agricultural universities, regional research institutions, and state agricultural extension agencies support these efforts at the regional and state levels. Central and state governments also support sugarcane growers by ensuring finances and input supplies at affordable prices.

To increase the area of cultivation and production in the country, the GOI has implemented the "Sustainable Development Fund of Sugarcane Based Cropping System Area under Macro Management Mode of Agriculture" program in various sugarcane growing states. Additionally, under the *Rashtriya Krishi Vikas Yojana* (National Agriculture Development Program), state governments have the flexibility to choose priorities for crop development projects, including sugarcane.

Per media reports, the Union Budget 2017/18 (April-March) allocated about \$76 million under the Sugar Development Fund to provide assistance in the form of interest to sugar mills towards working capital loans of about \$980 million. The GOI projects a sugar tax collection of about \$460 million. At the current exchange rate, the GOI collects \$3.58 per MT of sugar produced by mills in support of the Sugarcane Development Fund (SDF), which is used to support research, extension, and technological improvement in the sugar sector.

The SDF is also used to support sugar buffer-stock operations, provide a transport subsidy for sugar exports, and provide an interest subsidy on loans for the installation of power generation and ethanol production plants. In March 2008, the GOI enacted the SDF (Amendment) Bill, 2008, enabling the government to include the use of SDF funds for debt restructuring and soft loans to sugar mills.

The GOI establishes a minimum support price (MSP) for sugarcane based on recommendations from the Commission for Agricultural Costs and Prices, consultations with state governments, and sugar industry and cane growers' associations. In MY 2009/10, the GOI announced a new fair and remunerative price (FRP) system that links cane prices with miller's incomes. Several state governments augment the MSP/FRP, typically by 30-35 percent, due to political populism rather than market pricing. Sugar mills are required to pay the "state advised price" (SAP) to sugarcane farmers irrespective of market prices. A smaller cane crop normally encourages millers to pay higher cane prices, resulting in prices which exceed the MSP/FRP in most of the growing states.

Marketing:

Sugar Marketing Policy

As of April 1, 2017, the GOI will stop providing the INR 18.50/kilogram subsidy on sugar to states for selling it via public distribution system (PDS) at ration shops. A sum of about \$3 billion was allocated in the Union Budget 2017/18 for clearing past claims by state governments. Earlier, the GOI continued to subsidize sugar for consumers by allowing state governments to procure sugar from the market through open tenders. The gap between open market prices and PDS sale prices/retail issue price was covered by the GOI.

Following two years of deregulation of sale of sugar, the GOI in 2015 reviewed the 'decontrol of sugar marketing' and allowed states/Union Territories to either absorb the additional cost, if any, on account of handling, transportation and dealer's commission or pass it on to consumers by including it in the retail issue price (INR 13.50 per kg). The new system was adopted by 30 states/Union Territories (UTs). Industry sources expect that the sugar industry will continue to be subject to production controls by state governments, including sugar industry licensing, specified cane procurement areas for sugar mills, and cane pricing.

Ethanol Program

India's ethanol production in MY 2016/17 is likely at 1.65 billion liters, 20 percent below last year and the lowest in the last five years. This will possibly lead to demand rationing for potable use, industrial use and for blending with gasoline. Theoretically, the ethanol available is sufficient to meet the 5-percent blend target, but it will be hard to achieve even last year's blend rate of 1.85 percent.

Last year, on October 13, 2016, the Cabinet Committee on Economic Affairs revised ethanol prices for supply to public sector Oil Marketing Companies (OMCs) to carry out the ethanol blended gasoline

Program (EBP) in the following manner (Source: PIB Press release):

- Administered prices of ethanol for the EBP will be INR 39/liter from December 1, 2016 to November 30, 2017.
- Charges will be paid to the ethanol suppliers as per actuals in case of the excise duty and VAT/GST, and transportation charges as decided by OMCs.
- If the need arises to increase/reduce the retail prices of gasoline by public sector OMCs, then such increase/reduction would proportionately factor in the requirement of maintaining the fixed cost of purchase of ethanol during the ethanol supply year.
- Ethanol prices will be reviewed and revised by the GOI at any time depending upon the prevailing economic situation and other relevant factors.
- In December 2014, the GOI had announced a price-fixing scheme for parastatal OMCs to procure ethanol. The program fixed landed-ethanol prices at OMC depots from INR 48.50 to INR 49.50/liter. India's ethanol program is based on sugar molasses, a by-product of the sugar industry, and not directly from sugarcane or corn as in other countries. For more on India's ethanol program, please refer India's Biofuel Annual 2016 GAIN report IN6088.

Production, Supply and Demand Data Statistics:

Sugar, Centrifugal	2015/20	16	2016/2017		2017/2018	
Market Begin Year	Oct 201	15	Oct 201	16	Oct 2017	
India	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Beginning Stocks	10607	10607	9689	9292	0	6122
Beet Sugar Production	0	0	0	0	0	0
Cane Sugar Production	27530	27385	23945	21930	0	25810
Total Sugar Production	27530	27385	23945	21930	0	25810
Raw Imports	1350	1900	1400	1700	0	500
Refined Imp.(Raw Val)	2	0	0	0	0	0
Total Imports	1352	1900	1400	1700	0	500
Total Supply	39489	39892	35034	32922	0	32432
Raw Exports	100	0	0	0	0	C
Refined Exp.(Raw Val)	2900	3800	1500	1200	0	C
Total Exports	3000	3800	1500	1200	0	C
Human Dom. Consumption	26800	26800	27200	25600	0	26000
Other Disappearance	0	0	0	0	0	(
Total Use	26800	26800	27200	25600	0	26000
Ending Stocks	9689	9292	6334	6122	0	6432
Total Distribution	39489	39892	35034	32922	0	32432

Note: Stocks include only milled sugar, as all *khandsari* sugar produced is consumed within the marketing year. Virtually no centrifugal sugar is utilized for alcohol, feed, or other non-human consumption.

Table 2. India: Sugarcane, Centrifugal, Area in Thousand Hectares and others in Thousand Tons							
Sugar Cane for Centrifugal	2015/2016		2016/2017		2017/2018		
Market Begin Year	Oct 20)15	Oct 20	Oct 2016		17	
India	USDA Official	New Post	ew Post USDA Official New Post		USDA Official	New Post	
Area Planted	4918	4960	4700	4500	0	4700	
Area Harvested	5060	4960	4700	4500	0	4700	
Production	347000	348450	333000	288000	0	330000	
Total Supply	347000	348450	333000	288000	0	330000	
Utilization for Sugar	245000	238000	225000	190000	0	220000	
Utilization for Alcohol	102000	110450	108000	98000	0	110000	
Total Utilization	347000	348450	333000	288000	0	330000	

Note: Virtually no cane is utilized directly for alcohol production. 'Utilization for alcohol' in the PS&D includes cane used for *gur*, seed, feed and waste. 'Utilization for sugar' data include cane used to produce mill sugar and *khandsari* sugar

Table 3. India: Sugarcane Area, Production, and Utilization

Sugar Cana	Area ¹	Yield ¹	Product ¹	Sugar ¹	Khandsari ²	Gur ²	Seed ²
Sugar Cane	Mha	MT/ha	MMT	MMT	MMT	MMT	MMT
1990/91	3.69	65.39	241.05	122.32	13.18	76.63	28.93
1995/96	4.15	68.02	282.09	174.76	10.00	67.27	30.06
2000/01	4.32	69.35	299.32	176.65	11.00	75.75	35.92
2001/02	4.41	67.09	295.95	180.32	10.50	69.62	35.51
2002/03	4.52	63.58	287.38	194.33	9.50	49.07	34.49
2003/04	3.94	59.39	233.86	132.51	10.00	63.29	28.06
2004/05	3.66	64.74	237.08	124.77	9.50	74.36	28.45
2005/06	4.20	66.93	281.17	188.67	8.50	50.26	33.74
2006/07	5.15	69.03	355.52	222.00	10.00	80.86	42.66
2007/08	5.06	68.81	348.18	249.91	7.00	49.49	41.78
2008/09	4.44	64.19	285.02	145.00	6.50	99.32	34.20
2009/10	4.18	70.01	292.30	185.55	6.50	65.17	35.08
2010/11	4.89	70.09	342.38	240.00	7.50	53.79	41.09
2011/12	5.08	71.07	361.03	257.00	7.00	53.70	43.32
2012/13	5.06	67.38	341.20	251.50	7.00	41.75	40.94
2013/14	5.01	70.26	352.14	234.32	8.00	67.56	42.25
2014/15	5.14	70.44	362.33	265.40	8.00	45.45	43.48
2015/16	4.96	70.25	348.45	238.00	8.50	60.13	41.81
2016/17	4.50	64.00	288.00	190.00	8.50	54.94	35.56
2017/18	4.70	70.21	330.00	220.00	9.00	61.40	39.60

Note: Figures for 2016/17 and 2017/18 are FAS estimates.

Source: ¹ Directorate of Economic and Statistics, Ministry of Agriculture

Table 4. India: Mill Sugar Production by State, in thousand metric tons, crystal weight basis

	2014/15	2014/15 2015/16		2017/18
	Final	Revised	Estimate	Forecast
Andhra Pradesh	9.0	8.1	6.4	6.5
Bihar	5.3	5.2	4.6	5.0
Gujarat	11.4	11.5	11.0	10.0
Haryana	4.7	5.5	5.4	5.4
Karnataka	50.0	42.0	22.0	18.0
Maharashtra	105.0	84.0	44.0	79.0
Punjab	4.7	6.3	5.0	5.0
Tamil Nadu	12.0	14.0	10.0	9.0
Uttar Pradesh	71.0	69.0	85.0	93.0

² FAS/New Delhi Estimate.

Others	7.0	6.7	6.6	5.1
Total	280.10	252.30	200.00	236.00

Table 5. India: Commodity, Centrifugal Sugar, Price Table

(Prices in INR per metric ton)

Year	2015	2016	2017	Percent Change
January	30,000	31,750	39,400	19
February	28,500	33,500	39,600	15
March	27,300	36,200	39,400	8
April	27,600	36,300		
May	27,300	36,350		
June	25,700	37,800		
July	24,800	39,000		
August	26,400	38,500		
September	27,200	39,100		
October	29,200	39,300		
November	28,700	38,000		
December	31,100	38,200		
E1 D-t	64.13	67.75	67.00	
Exchange Rates:	Local Currency	/ INR/US \$		

Note: Exchange rates for 2015, 2016 and 2017 refer to respective Marketing Years (October–September). **Source & Contract Terms:** Indian Sugar Mills Association and NFCSF; month-end prices in the Delhi wholesale market.

Table 6. India: Commodity, Gur, Price Table

(Prices in INR per metric ton, actual weight basis)

Year	2015	2016	2017	Percent Change
January	28,000	29,000	32,000	10.34
February	33,000	29,500	31,000	5.08
March	31,000	30,750	31,600	2.76
April	29,000	33,000		
May	31,000	33,500		
June	31,500	37,000		
July	33,000	41,000		
August	30,000	40,500		
September	31,000	40,500		
October	30,000	35,500		
November	28,500	31,500		
December	31,000	32,000		
Exchange Rate:	60.85	64.13	66.89	
	Local Currency			

Note: Exchange rates for 2015, 2016 and 2017 refer to respective Marketing Years (October-September).

Source & Contract Term: Indian Sugar Mills Association and NFCSF; month-end prices in the Delhi wholesale market.

Table 7. India: Comparative Commodity Support Price Table, INR per metric ton, Minimum Support Price (MSP) or Fair Remunerative Price (FRP)

Marketing Year	2013/14	2013/14	2015/16	2016/17
Wheat	14,000	14,500	15,250	16,250
Rice (Grade A)	13,450	14,000	14,500	15,100
Sugarcane	2,100	2,200	2,300	2,300
	State Advised Price	e (SAP) for Sugarcane	e, by State	
Uttar Pradesh	2,750-2,900	2,750-2,900	2,700-2900	3,000-3,150
Haryana/Punjab	2,750-3,000	2,800-3,100	2,950-3,500	3,100-3,200
Southern States ¹	2,500-2,650	2,200-2650	2,650-2,850	2,300-3,050

^{1:} Sugar mills pay market price.

Source: Indian Sugar Mills Association

Note: Latest media report indicate that the Commission for Agricultural Costs and Prices, GOI has recommended a FRP for sugar season 2017/18 at INR 255 per quintal at 9.5 percent recovery level.

Table 8. India: Import Trade Matrix, Centrifugal Sugar, MY 2015/16, In Metric Tons

Period	Raw Sugar ^	White Sugar	Total
October		138	138
November		259	259
December		241	241
January		128	128
February		385	385
March		376	376
April		71	71
May		118	118
June		193	193
July		130	130
August		289	289
September		130	130
Total	1,900,000	2,458	1,902,458

Source: Industry and trade source.

^{^:} Estimated. Month wise break-up data unavailable

Table 9. India: Export Trade Matrix, Centrifugal Sugar, MY 2015/16, In Metric Tons

Period	Raw Sugar	White Sugar	Total
October		209,813	209,813
November		274766	274766
December		532629	532629
January		456003	456003
February		367459	367459
March		384325	384325
April		278285	278285
May		256354	256354
June		177100	177100
July		222924	222924
August		232843	232843
September		136930	136930
Total		3,529,431	3,529,431

Source: Industry and Trade sources.

Month wise break-up data unavailable. An estimated 300,000 MT is unaccounted.